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मानक

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“Step Out From the Old to the New”

IS 13804 (1993): Inland vessels - Sheaves for dredgers - Dimensions [TED 18: Inland, Harbour Crafts and Fishing Vessels]



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Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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भारतीय मानक

अन्तर्देशीय जलपोत — ट्रेजरो की चरखियाँ — आयाम

Indian Standard

INLAND VESSELS — SHEAVES FOR
DREDGERS — DIMENSIONS

UDC 629'122 : 629'12'014'24

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BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards, after the draft finalized by the Inland and Harbour Craft Sectional Committee had been approved by the Transport Engineering Division Council.

This standard gives the requirements for sheaves for dredgers for general use. While preparing this standard assistance has been derived from JIS F 3992-1981 'Dredger's sheaves for general use', issued by Japanese Industrial Standards Committee.

The Committee responsible for the preparation of this standard is given in Annex A.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

INLAND VESSELS — SHEAVES FOR DREDGERS — DIMENSIONS

1 SCOPE

1.1 This standard specifies the dimensional and general requirements of sheaves for dredgers for general use.

2 REFERENCES

2.1 The following Indian Standards are necessary adjuncts to this standard:

<i>IS No.</i>	<i>Title</i>
318:1981	Leaded tin bronze ingots and castings (<i>second revision</i>)
319:1989	Free cutting brass bars, rods and sections — Specification (<i>fourth revision</i>)
1030:1989	Carbon steel castings for general engineering purposes (<i>fourth revision</i>)

3 TYPES

3.1 The sheaves shall be of two types, namely, Type A and Type B according to the shape of the grooves as shown in Fig. 1.

4 DIMENSIONS

4.1 The dimensions of sheaves of Type A and Type B shall be as given in Table 1.

5 MATERIALS

5.1 The materials of various components shall be as given below:

<i>Sl No.</i>	<i>Component</i>	<i>Material</i>
i)	Body	Steel casting to Grade 230 — 450 W of IS 1030:1989
ii)	Bush	Grade LTB 5 of IS 318 : 1981
iii)	Set Screw	Grade 1 and Grade 2 of IS 319:1989

6 GENERAL REQUIREMENTS

6.1 The sheaves shall be free from any defects such as blow holes, etc.

7 DESIGNATION

7.1 The sheaves shall be designated by the name, the number of this standard, type and nominal size.

Example : The sheaves of Type A and of nominal size 20 shall be designated as follows:

Sheave IS 13804 — A-20

8 MARKING

8.1 The sheaves shall be indelibly marked with nominal size, year of manufacture and the source of manufacture.

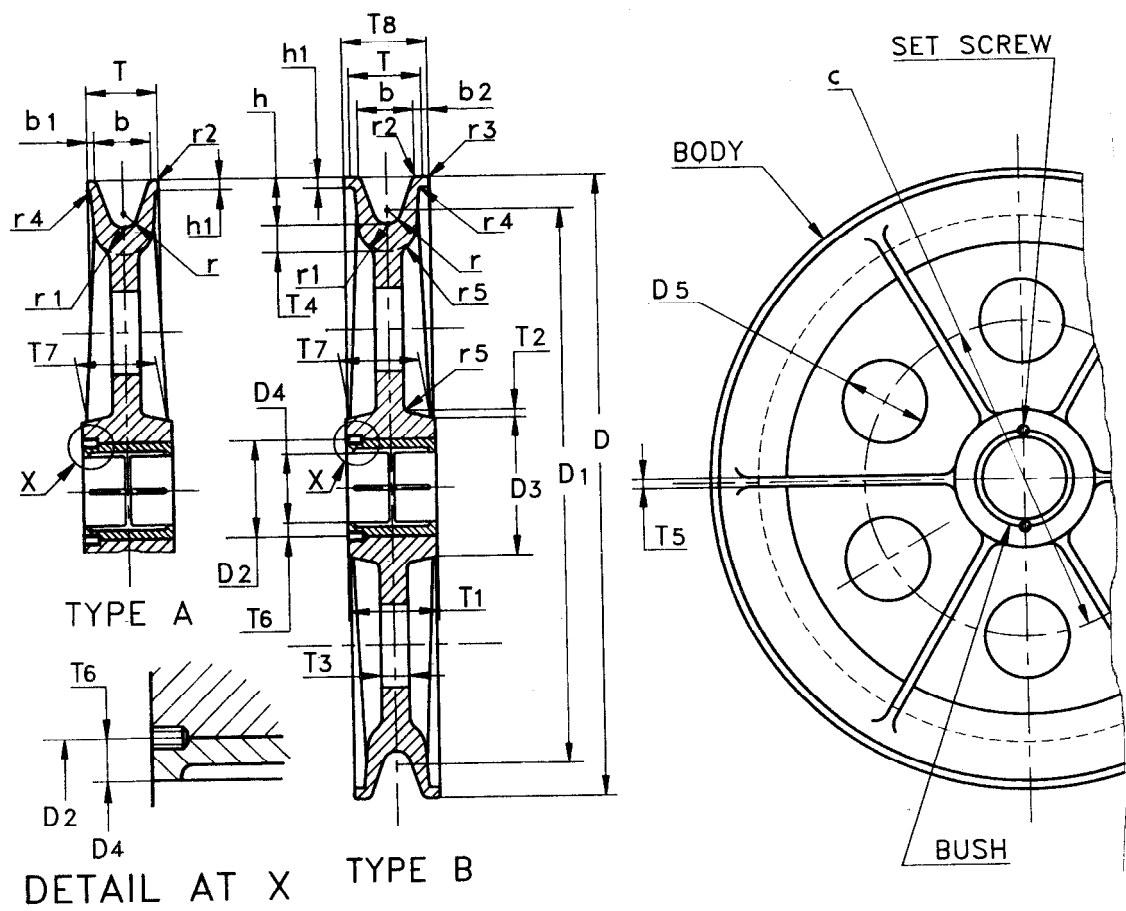


FIG. 1 DIMENSIONS OF SHEAVES TYPE A AND TYPE B
(READ WITH TABLE 1)

Table 1 Dimensions of Sheaves Type A and Type B

(Clause 4.1, and Fig. 1)

All dimensions in millimetres.

Nomi- nal Size	D	D1	D2	D3	D4	D5	T	T1	T2	T3	T4	T5	T6	T7	b	b1	c	h	h1	r	r1	r2	r3	r4	r5	T8*	b2*	Dia Wire Rope
20	448	400	70	100	60	60	50	63	5	20	20	10	5.0	57	38	6	228	34	10	11.0	21	5.0	2	2	10	61	11.5	20
24	532	480	87	120	72	70	58	76	5	20	20	10	7.5	70	44	7	275	38	10	13.0	21	5.0	2	2	12	74	15.0	24
25	580	520	93	130	78	76	62	82	6	20	22	12	7.5	76	46	8	297	43	12	14.0	23	7.5	2	2	14	80	17.0	26
28	628	560	100	140	85	82	66	89	6	20	23	14	7.5	82	50	8	320	48	14	15.0	24	7.5	2	2	16	87	18.5	28
32	714	640	110	160	95	100	72	100	7	20	26	16	7.5	92	56	8	368	53	16	17.0	27	7.5	2	2	18	98	21.0	30
36	804	720	126	180	106	110	80	112	7	23	29	18	10.0	104	62	9	418	60	18	19.0	31	10.0	5	3	18	110	24.0	36
40	894	800	138	200	118	120	88	125	7	25	32	20	10.0	115	68	10	458	67	20	21.0	34	10.0	5	3	20	123	27.5	40
45	1 003	900	155	230	135	138	102	142	8	28	36	22	10.0	132	78	12	526	75	22	23.5	38	10.0	5	3	20	140	31.0	46
50	1 120	1 000	167	250	147	150	110	154	8	32	38	24	10.0	144	84	13	572	85	25	26.0	40	10.0	5	3	25	152	34.0	50
56	1 254	1 120	184	280	164	170	120	172	9	36	42	26	10.0	160	92	14	640	93	30	29.0	44	10.0	5	3	25	170	39.0	56
63	1 415	1 260	210	315	190	200	132	200	9	40	48	30	10.0	188	102	15	737	110	35	32.5	50	10.0	5	3	30	198	48.0	60

*Applicable to Type B only.

ANNEX A

(Foreword)

COMMITTEE COMPOSITION

Inland and Harbour Craft Sectional Committee, TE 18

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